To: Slayton, Joe[Slayton.Joe@epa.gov]; Gundersen, Jennifer[Gundersen.Jennifer@epa.gov]; Graybill, Eric[graybill.eric@epa.gov]; Warner, Sue[Warner.Sue@epa.gov]; Zawodny,

Peggy[Zawodny.Peggy@epa.gov] **From:** Caporale, Cynthia

Sent: Sat 1/25/2014 5:18:33 PM Subject: Fw: PPH Discussion Group

From: Weis, Christopher (NIH/NIEHS) [E] <christopher.weis@nih.gov></christopher.weis@nih.gov>
Sent: Saturday, January 25, 2014 12:17:14 PM
Fo: Grant, Gregory L LTC USARMY (US); Ex. 6 - Personal Privacy
Ex. 6 - Personal Privacy Arguto, William; Ex. 4 - CBI
pucher@niehs.nih.gov; Burns, Francis; Capacasa, Jon; Caporale, Cynthia Ex. 6 - Personal Privacy
Ex. 6 - Personal Privacy com'; Cox, Edward C MAJ USARMY NG VAARNG (US); Ex. 6 - Personal Privacy Cseh, Larry
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ATSDR/DTHHS/OD); Ex. 6 - Personal Privacy 'martha.a.mcelfresh@wv.gov';
masten@niehs.nih.gov; Miller, Aubrey (NIH/NIEHS) [E];
Ex. 6 - Personal Privacy
Ex. 6 - Personal Privacy Singhvi, Raj; 'steven.hedrick@matricresearch.com'; Ex. 6 - Personal Privacy (US)
Kapil, Vikas (CDC/ONDIEH/NCEH); 'walter.m.ivey@wv.gov'; Werner, Lora
Subject: RE: PPH Discussion Group

Lt. Col. Grant:

In support of CDC/ATSDR activities, we have been in contact with the manufacturer of PPH, Basic. They have been cooperatively providing key information to us regarding toxicology and exposure. In cooperation with CDC/ATSDR and other partners we are reviewing this information. As we continue to receive and process toxicology information, I encourage the analytical team to continue to work toward lowering the reporting limit for PPH, possibly considering sample concentration and/or product derivatization.

Ex. 4 - CBI at the DOW Chemical Company is available for consultation on anlytical chemistry for this product and I have included his contact information below.

Chris

Christopher P Weis, Ph.D., DABT.
Toxicology Liaison / Senior Advisor
Office of the Director
National Institute of Environmental Health Science
National Institutes of Health
Bethesda, MD
Tel: 301.496.3511

Ex. 4 - CBI

Ex. 4 - CBI

From: Grant, Gregory L LTC USARMY (US) [Ex. 6 - Personal Privacy
Sent: Saturday, January 25, 2014 11:35 AM
To: Ex. 6 - Personal Privacy ; 'arguto.william@epa.gov'; Ex. 4 - CBI Bucher, John (NIH/NIEHS) [E]; 'burns.fran@epa.gov';
Joannesses ion@one govil Joannesses quettic@one govil ! Ev. C. Bernand Brivany i Mois Christopher
'capacasa.jon@epa.gov'; 'caporale.cynthia@epa.gov'; 'Ex. 6 - Personal Privacy'; Weis, Christopher
(IS): Fx 6 - Personal Privacy letitia tierney/@wy gov!: 'I inda Henry/@amwater com!' Cseh Larry
(ATSDR/DTHHS/OD): 'I Fx 6 Personal Privacy : 'martha a mcelfresh@wy gov': Masten, Scott
(NIH/NIEHS) [E]; ' Ex. 6 - Personal Privacy ; 'Cox, Edward C MAJ USARMY NG VAARNG (US); Ex. 6 - Personal Privacy ['letitia.tierney@wv.gov'; 'Linda.Henry@amwater.com'; Cseh, Larry (ATSDR/DTHHS/OD); ' Ex. 6 - Personal Privacy ; 'martha.a.mcelfresh@wv.gov'; Masten, Scott (NIH/NIEHS) [E]; Miller, Aubrey (NIH/NIEHS) [E]; Ex. 6 - Personal Privacy Ex. 6 - Personal Privacy
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CTR (US); Kapil, Vikas (CDC/ONDIEH/NCEH); 'walter.m.ivey@wv.gov'; 'werner.lora@epa.gov'
Subject: Re: PPH Discussion Group
CDC/ATSDR/EPA,
Does anyone on this group have update on toxicology information for the PPh. We are still waiting on this
information to provide to labs as far as non detect threshold being set. Any update would be appreciated
even if no further action has been decided.
Thanks,
manko,
Greg Grant, LTC, WVARNG
Commander
35th Civil Support Team (WMD)
5 Armory Drive
Saint Albans, WV. 25177
Ex. 6 - Personal Privacy
EX. 0 -1 croonary rivacy
Sent from my blackberry
Fre C. Bereauel Britany
From: Ex. 6 - Personal Privacy
Sent: Saturday, January 25, 2014 11:10 AM To: Ex. 6 - Personal Privacy arguto.william@epa.gov
<arguto.william@epa.gov>; Ex. 4 - CBI</arguto.william@epa.gov>
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capacasa.jon@epa.gov <capacasa.jon@epa.gov>: caporale.cvnthia@epa.gov</capacasa.jon@epa.gov>
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<pre><caporale.cynthia@epa.gov>; <christopher.weis@nih.gov>;</christopher.weis@nih.gov></caporale.cynthia@epa.gov></pre> <pre>christopher.weis@nih.gov>;</pre> <pre>christopher.weis@nih.gov>;</pre>
Ev. 6 Porsonal Privacy, Cox, Edward C MAJ USARMY NG VAARNG (US);
Ex. 6 - Personal Privacy Cox, Edward C MAJ USARMY NG VAARNG (US); g@matricinnovates.com>; Grant, Gregory L LTC USARMY (US);
letitia.tierney@wv.gov <letitia.tierney@wv.gov>; Ex. 6 - Personal Privacy</letitia.tierney@wv.gov>
letitia.tierney@wv.gov <letitia.tierney@wv.gov>; Ex. 6 - Personal Privacy Cseh, Larry F CAPT (US); Ex. 6 - Personal Privacy com>; martha.a.mcelfresh@wv.gov < martha.a.mcelfresh@wv.gov>;</letitia.tierney@wv.gov>
com>; martha.a.mcelfresh@wv.gov <martha.a.mcelfresh@wv.gov>;</martha.a.mcelfresh@wv.gov>
masten@niens.nin.gov <masten@niens.nin.gov>; miller.aubrey@nin.gov <miller.aubrey@nin.gov>;</miller.aubrey@nin.gov></masten@niens.nin.gov>
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Ex. 6 - Personal Privacy singhvi.raj@epa.gov <singhvi.raj@epa.gov>: Ex. 6 - Personal Privacy Ex. 6 - Personal Privacy (US); vck3@cdc.gov <vck3@cdc.gov>; walter.m.ivey@wv.gov <walter.m.ivey@wv.gov>; werner.lora@epa.gov <werner.lora@epa.gov> Subject: RE: PPH Discussion Group We have completed our analysis of the samples for 1/10/14 through 1/16/14. The detection limit of 0.6 ppm of the DiPPH was confirmed using a 0.6 ppm DiPPH and 0.6 ppm PPH spiked standard. The standard was run before and after the water samples to ensure the detection was not lost due to any instrument problems that could have occurred during the sample sequence. To interpret the accurate limits of detection for the water samples, it is recommended the MCHM tank compositions be verified in a duplicate analysis or be determined independently. Our initial analysis of the MCHM tank concluded that the ratio of DiPPH to PPH was 50:50. So the detection at this composition would be 1.2 PPM for the combined PPH + DiPPH. Our current understanding of the MCHM tank contents suggest that the PPH to DiPPH ratio is closer to 5 : 95 to 10: 90. Using this ratio the detection limits for the combined PPH + DiPPH would be 0.7 ppm. The "PPH" tank sample was analyzed earlier and the PPH to DiPPH was in agreement with the 5:95 to 10:90 ratio. However, a ratio much higher in PPH is not out of question and can be reasoned based on the manufacturing process. This is why we are recommending the MCHM tank sample be further analyzed for an accurate determination of the PPH to DiPPH ratio. The water sample detection limits assume is that the MCHM tank contents were well mixed, the composition was uniform throughout the tank when breeched, and the current MCHM sample represents the spill composition.. The results are tabulated below. **Priority Samples** Top Priority Date Time Result 0.6 ppm (DiPPH spiked) 1/24/2014

Detected

1/10/2014
0845
Not Detected
P004 Finished
1/10/2014
1040
Not Detected
P005 Raw
1/10/2014
0845
Not Detected
P006 Raw
1/10/2014
1040
Not Detected
Raw
1/11/2014
0905
Not Detected
Finished
1/11/2014
0920
Not Detected
Raw
1/11/2014
1000
Not Detected

P003 Finished

1/11/2014
1000
Not Detected
Raw
1/12/2014
1600
Not Detected
Finished
1/12/2014
1600
Not Detected
Raw
1/12/2014
2200
Not Detected
Finished
1/12/2014
2200
Not Detected
P007 Raw
1/13/2014
0210
Not Detected
Finished
1/13/2014
0210
Not Detected

Finished

Not Detected
P009 Raw
1/13/2014
0600
Not Detected
Raw Morning
1/14/2014
0600
Not Detected
Finished Morning
1/14/2014
0800
Not Detected
Raw Afternoon
1/14/2014
1800
Not Detected
Finished Afternoon
1/14/2014
1800
Not Detected
Raw Morning
1/15/2014
0600
Not Detected

P008 Finished

1/13/2014

0600

Not Detected
Raw Afternoon
1/15/2014
1800
Not Detected
Finished Afternoon
1/15/2014
1800
Not Detected
Raw Morning
1/16/2014
0500
Not Detected
Finished Morning
1/16/2014
0500
Not Detected
Raw Afternoon
1/16/2014
1700
Not Detected
Finished Afternoon
1/16/2014
1700
Not Detected

Finished Morning

1/15/2014

0600

0.6 ppm (DiPPH spiked)

1/25/2014

Detected

If anyone has any question please contact me at 304-941-8424.

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[https://mail.matricresearch.com/downloads/MATRICSquareLogo.gif]

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